

Hurricane Harvey-Texas  
ESF-10  
Situation Report #5

**Subject:** SITREP #5  
**To:** Agency Leads  
**Thru:** Matthew Loesel. PSC  
**From:** Unified Command  
**Date:** 9/3/2017  
**Reporting Period:** 9/3/2017

## **1. Introduction**

### **1.1. Background**

Hurricane Harvey made landfall at 2300 ET, August 26<sup>th</sup>, as a Category 4 storm near Rockport, Texas. Harvey stalled over southeastern TX. Due to its slow motion and a prolonged period of onshore flow, the impacted areas received more than 50 inches of precipitation which subsequently led to catastrophic flooding. .

An ESF-10 Mission Assignment was signed on August 28, 2017. The US Environmental Protection Agency (EPA), Texas Commission on the Environmental Quality (TCEQ), Texas General Land Office (TGLO) and the US Coast Guard (USCG) have entered into Unified Command to begin the evaluation, clean-up and recovery of spills, releases and orphan containers.

## **2. Current Activities**

### **2.1. Operations Section**

On September 3, 2017, the Unified Command continued operations in accordance with the Natural Disaster Operational Workgroup (NDOW) Standard Operating Procedures, NDOW forms and Response Manager. The Unified Command is supported by two operational branches: Alpha Branch in Corpus Christi, Bravo Branch in Houston. A third operational branch, Charlie Branch, is currently being established in Port Arthur.

A number of organizational changes occurred within each branch from the past operational period. As areas are evaluated, the focus changes from assessment to recovery. Several additional Oil Recovery and Container Recovery teams were added throughout Alpha and Bravo Branches.

The geographic areas focused on by Alpha Branch during the previous operational period including Port Aransas and Mustang Island are largely complete except orphan containers being carried in from the tide. These containers will be addressed as they are discovered. The Alpha Branch geographic areas evaluated this operational period include Rock Port, Aransas Bay and Victoria.

Discussions regarding Charlie Branch have started and when feasible, several EPA personnel and a Data Unit will be deployed.

Table 1 displays the teams which were deployed in Alpha and Bravo Branches during this operational period:

**Table 1: Quantity and Types of Teams Deployed 9/3/17**

<b>Team Type</b>	<b>Alpha Branch</b>	<b>Bravo Branch</b>
Water Assessment Teams	1	8
Hazard Evaluation	2	8
Oil Discharge Assessment	3	5
Container Recovery	0	2
Oil Recovery Group	2	0
ER/Recovery Group	1	0
Arkema Group	0	1
Air Operations Group	0	2

Bravo Branch completed site assessments at 24 public water systems and 14 wastewater treatment facilities. That information is not shown in the table below as the data was not entered into Response Manager when the report was sent. Two EPA contractors are mobilizing to Houston to ensure timely data entry.

<b>Status Detail</b>	<b># of Facilities Assessed</b>		
	<b>Alpha 9/3/17</b>	<b>Bravo 9/3/17</b>	<b>Cumulative</b>
No problems	0	0	3
Lifted BWN due to negative BacT samples. Normal operations resumed	0	0	0
System destroyed	0	0	0
On generator – never lost pressure	0	0	5
On generator – lost pressure	0	0	9
Lost pressure & or Treatment	1	0	6
BacT sample results pending	0	0	2
Lost Power – maintaining pressure	0	0	0
Not Operating	0	0	8
Site visit needed	0	0	0
Out of Contact	0	0	1
Contact Pending	0	0	1

The phone bank in Austin, consisting of EPA and TCEQ personnel continue contacting drinking water and waste water facilities by phone.

**Table 2: Drinking Water Facilities Contacted and Current Status**

<b>Status Detail</b>	<b># of Contacts on 9/3/17</b>	<b>Cumulative*</b>
No problems	174	2085
Lifted BWN due to negative BacT samples. Normal operations resumed	7	110
System destroyed	1	4
On generator – never lost pressure	0	24
On generator – lost pressure	2	24
Lost pressure & or Treatment	12	80
BacT sample results pending	10	62
Lost Power – maintaining pressure	0	1
Not Operating	6	44
Site visit needed	1	5
Out of Contact	0	195
Contact Pending	34	120
<b>Totals</b>	<b>247</b>	<b>2754</b>

**\*Cumulative counts all calls made where the status of the call was that found in the Status Detail field.**

**Table 3: Waste Water Facilities Contacted and Current Status**

<b>Status Detail</b>	<b># of Contacts on 9/3/17</b>	<b>Cumulative*</b>
No Problems	54	1837
System Destroyed	0	2
WWTP and/or Collection on Generator or bypass pumps for LS	3	34
WWTP and/or Collection Partially Operational SSO	4	56
WWTP and/or Collection non operational no SSO	1	11
Site Visit Needed	0	0
Out of Contact - phone eval only	0	14
Contact Pending - Phone eval only	27	1107
<b>Totals</b>	<b>89</b>	<b>3061</b>

**\*Cumulative counts all calls made where the status of the call was that found in the Status Detail field.**

**Table 4: Daily/Cumulative Summary of Hazard Evaluations/Recovery**

Status	Opened		Closed	
	9/3/2017	Cumulative	9/3/2017	Cumulative
Alpha Branch	6	43	11	50
Bravo Branch	26	94	7	10
NRC Reports	0	3	0	0

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

**Table 5: Daily/Cumulative Summary of Spills/Discharges**

Status	Opened		Closed	
	9/3/2017	Cumulative	9/3/2017	Cumulative
Alpha Branch	9	339	2	28
Bravo Branch	0	30	2	3
NRC Reports	2	21	0	7

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

## 2.2. Other Notable Activities

Alpha Branch reported the notable activities for this operational period:

- Pre-sampling of staging area pads was completed with a total of 14 soil samples taken.
- A total of 73 orphan containers have been collected at the Alpha Branch staging area.

DATE	CONTAINERS			Cylinders	TOTALS	
	Drums [55gal]	Small Containers [< 55gal]	Large Containers [> 55gal]		Total Items Collected Today	Total Items Collected Project to Date
9/1/2017	26	22	1	1	49	49
9/2/2017	6	10	1		17	66
9/3/2017	7			3	7	73

- EPA staff continue reviewing backlog list of NRC reports compared to Response Manager targets in an effort to ensure no sites or calls have been overlooked.
- TCEQ operations are being turned back over to TCEQ regional office.

- ER/Recovery Group: Six hazardous material drums were discovered near a recreational area in Victoria and removed.
- Oil Discharge Assessment Group: In Mesquite Bay, a team discovered a sheen (300 yards x 5 yards). The suspected source is a nearby platform owned by Chaparral. No ongoing discharge was observed. The responsible party and Texas Railroad Commission were notified.
- In Port Aransas, another oversaw oil removal operations on multiple ferries. The vessel JC DINGWALL was righted and moored. The removal of over 300,000 gallons of diesel from the Signet Enterprise (an ocean-going tug) continued.
- The Signet Arturis (an ocean- going tug) was moving for repairs and began to leak oil around Bludworth Marine. An OSRO was on scene and mitigated/recovered the discharge.

Bravo Branch reported the notable activities for this operational period:

- Bravo Branch Houston is operational with Warren Zehner and Matt Tilimon as Deputy. Approximately 80 responders reported to the operations briefing.
- An EPA Team began mobile air monitoring in the Manchester community located in the NE quadrant of Interstate Highway 610 (I-610) and State Highway 225 in Houston, Harris County, Texas. At least 6 locations were monitored, all monitoring results were at background conditions.
  - 3 monitoring location adjacent to the Manchester Community Center
  - 2 monitoring locations adjacent to the Manchester Baptist Church
  - 1 monitoring location adjacent to the St. Alphonsus Catholic Church
- The Oil Discharge Assessment Group visited 13 facilities and queried seven others throughout the Houston area. The Group also assessed four sunken vessels. Of those targets, two are of particular concern and an additional five need follow-up in the next week.
- The Magellan facility along the Houston Ship Channel reported approximately 25,000 barrels of a gas/stock blend released within their facility and currently contained in secondary containment. An OSRO has been hired and they drafted a transfer plan to conduct an over the top transfer from secondary containment back into a facility tank. The transfer plan was routed to USCG Sector Houston Operations Department and pends approval following safety assessment.

- The San Jacinto River and Rail Facility reported approximately 15,000 gallons of waste oil discharged within their facility. In addition, 12 mystery drums were scattered across the facility. Damage Assessment teams confirmed that vegetation and residual ponds are coated with an oil. The RP is in the process of hiring an OSRO to commence clean-up operations. No mobile oil visible was in the waterway. Discharge assessment teams plan to follow-up to confirm clean-up moves forward and conduct SCAT.
- The Air Operations Team was airborne throughout the day and reported no major pollution concerns, but noted small targets to investigate along the shoreline. They did note that the Lake Houston area was still heavily flooded, but waters were receding quickly. The Air Team assessed from Galveston to Matagorda, canvassed the Houston harbor and conducted a sortie over Lake Houston.
- The hazard evaluation is 100% complete on shoreline assessments. A team was routed to investigate a report of adrift containers at an intersection in Dickens. Responders confirmed containers were not on the road and marked them for further investigation.
- ARKEMA: As of early Sunday, September 3, three trailers of organic peroxide caught fire following compromise of refrigeration units due to catastrophic flood waters. The remaining trailers were at risk of catching fire over the next few days. Rather than risk additional damage to the facility or the surrounding area, the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office performed a controlled ignition. First responders were outside the evacuation zone, but remained in the area, for quick response to ensure the safety of the community around the facility. Local officials maintained a 1.5-mile area of evacuation to assure that the public is protected. Air monitoring has confirmed that this is sufficient based on current conditions and events.
- ASPECT: During the previous operational period ASPECT was tasked with monitoring the situation at the Arkema facility. This consisted of multiple periodic (30 minute) sweeps of the facility. Once completed ASPECT resumed Rapid Needs Assessments at targets west and south of Arkema. ASPECT completed about ½ of zone 5 (Crosby to Huffman) consisting of approximately 39 target points. The system has also been assigned targets in Zone 6 (Crosby down to Baytown) consisting of 49 targets.

ASPECT flights collected aerial images over several hundred target sites. These targets have been categorized by the ASPECT team into geographic area designated by chronological zone numbers. Figure 1 shows the current zones being surveyed today. Zones 5 & 6 are being flown because of their proximity to the Arkema site.

**Figure One. Zones Five and Six.**



Figure Two shows locations where ASPECT has conducted chemical monitoring in Harris County to date. To date, there have been no confirmed detections over primary targets which are wastewater and drinking water treatment facilities. ASPECT is expected to fly in the Alpha Branch on September 4, 2017.

**Figure Two. ASPECT monitoring locations in Harris County.**



Charlie Branch reported the notable activities for this operational period:

- During this operational period, two EPA OSCs mobilized to Charlie Branch to start up field operations. Much of the Branch is still inaccessible due to flooding. An operational structure is being set up to begin field ops. The EPA Branch Director conducted a conference call with EPA, USCG, TGLO, and TCEQ to plan operations for next several days. Data support is expected on scene to assist with data support. This Branch is in need of a command trailer or command post to conduct operations. The current location for Charlie Branch is a USCG small trailer in Target parking lot adjacent to the Port Arthur MSU.

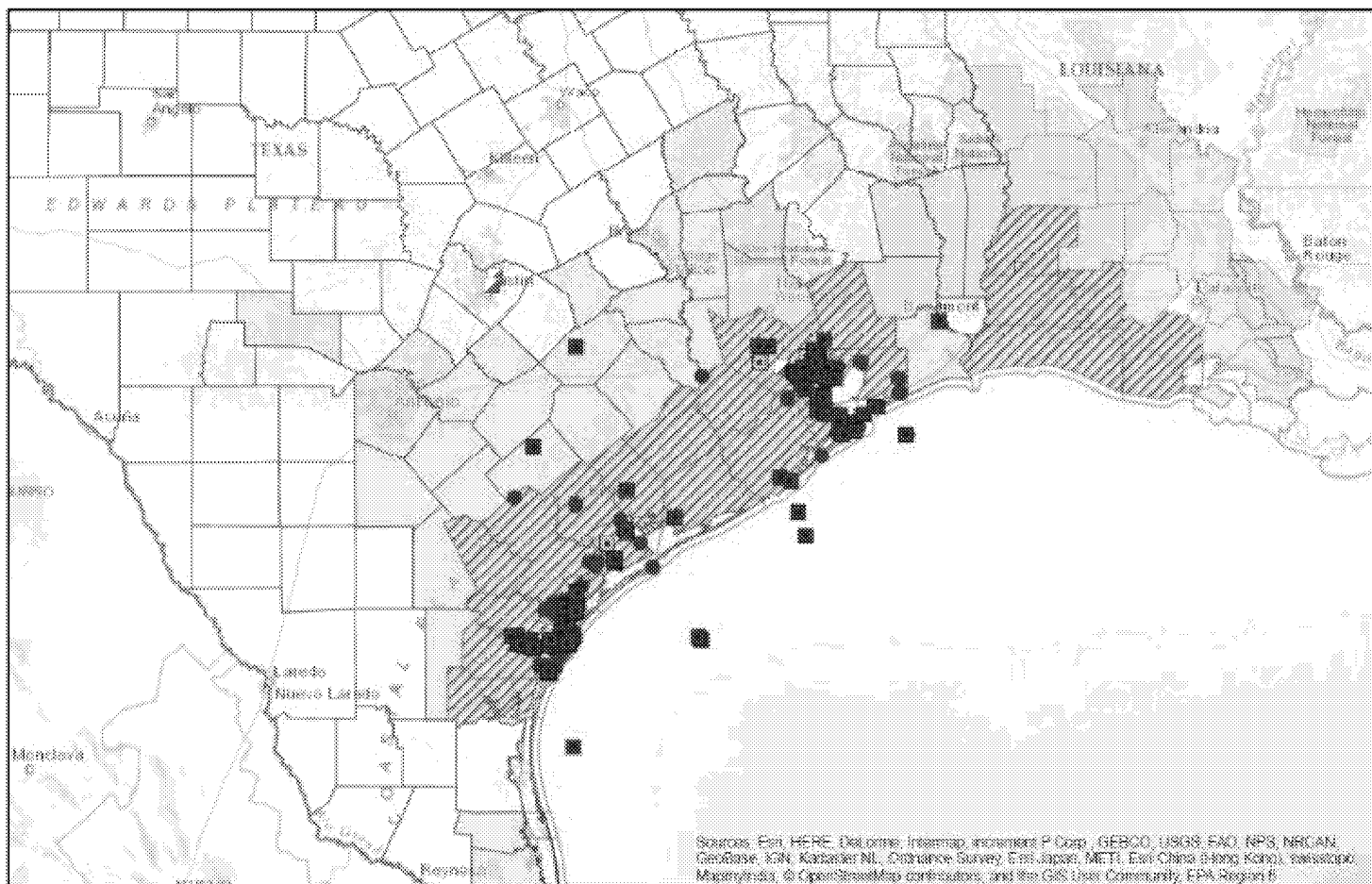
### 3. Participating Agencies

- Texas Commission on Environmental Quality
- Texas General Land Office
- Texas Parks and Wildlife
- 6<sup>th</sup> Civil Support Team
- US Environmental Protection Agency
- US Coast Guard
- National Oceanic and Atmospheric Agency

### 4. Personnel on Site

Agency	ICP	Alpha Branch	Bravo Branch	Charlie Branch*	Austin
US EPA	6	3	14		9
USCG	10	21	29	1	
TCEQ	2	17	30		
TGLO	6	2			
CST	8	9			
Contractors	5	6	5		

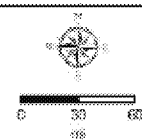
\*Charlie Branch in process of being staffed.



# Legend

- |         |           |                             |                         |
|---------|-----------|-----------------------------|-------------------------|
| Open    | Open      | Resources Locations         | State Declared Counties |
| Closed  | Closed    | Federally Declared Counties | Counties                |
| Unknown | No Status |                             |                         |

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